

# Addition, Subtraction, Multiplication and Division: Problem Sorter

<b>Aim:</b> Solve problems involving addition, subtraction, multiplication and division.  I can decide which operation to use and explain why.	<b>Success Criteria:</b> I can decide whether a problem has one or two steps.  I can decide if I need to use addition, subtraction, multiplication or division.	<b>Resources:</b> Lesson Pack Whiteboards and pens
	<b>Key/New Words:</b> Solve, total, more, minus, plus, decrease, increase, sum, difference between, total, altogether, calculate, method, spent, change, nearest multiple, doubling, halving, multiply, multiplication, lots of, groups of, divide, division, fraction, percentage.	<b>Preparation:</b> Operation Signs - 1 per class Differentiated Problem Sorter Activity Sheet - 1 per child Extra Challenge Activity Sheet - as required RUCSAC Prompt Cards - as required

**Prior Learning:** It will be helpful if children have a secure understanding of place value, number bonds, multiplication facts and corresponding number facts.

## Learning Sequence

	<b>Head-to-Head:</b> Select two children. On each of the slides from the <a href="#">Lesson Presentation</a> , there is a question along with four possible answers. Each child only has one attempt to touch a correct answer on the board. The first child to select the correct answer wins. Repeat with different pairs of children.							
	<b>How Do You Solve a Problem?</b> Read through the slides from the <a href="#">Lesson Presentation</a> , modelling using RUCSAC to help identify the operation/s that is/are required. Repeat with further examples if required.							
	<b>Operations:</b> Working with a partner, children use the 'RUC' in RUCSAC to identify whether the word problem requires addition, subtraction, multiplication or division. The children stand next to the appropriate <a href="#">Operation Sign</a> to indicate their answer. <i>Can the children select the key words in the word problems? Which operation did they choose?</i>							
	<b>Problem Sorter:</b> Using the differentiated <a href="#">Problem Sorter Activity Sheets</a> , children solve the word problems, <i>identifying the operation/s needed to solve them</i> . Remind children to use the 'RUC' from RUCSAC to help them during the task, providing <a href="#">RUCSAC Prompt Cards</a> if required. <table style="width: 100%; margin-top: 10px;"> <tr> <td style="text-align: center;"></td> <td>Answer one-step problems involving all four operations by <i>deciding which operation to use</i> to solve which calculation.</td> <td style="text-align: center;"></td> <td>Answer two-step problems involving all four operations by <i>deciding which operations to use</i> to solve which calculation.</td> <td style="text-align: center;"></td> <td>Answer two-step problems involving all four operations by <i>deciding which operations to use</i> to solve which calculation. An <a href="#">Extra Challenge Activity Sheet</a> is provided as an extension activity if required.</td> </tr> </table>		Answer one-step problems involving all four operations by <i>deciding which operation to use</i> to solve which calculation.		Answer two-step problems involving all four operations by <i>deciding which operations to use</i> to solve which calculation.		Answer two-step problems involving all four operations by <i>deciding which operations to use</i> to solve which calculation. An <a href="#">Extra Challenge Activity Sheet</a> is provided as an extension activity if required.	
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	<b>All Sorted:</b> Review children's learning. Show the questions and operations on the <a href="#">Lesson Presentation</a> . Children indicate their understanding of which operations are most appropriate to use, and solve the problems on their whiteboards. <i>Can children identify the operations required? Can children solve the problems using RUCSAC?</i>							

## Masterit

**Challengeit:** Children work through the problems on these [Year 6 Calculation Addition and Subtraction Problems Maths Mastery Challenge Cards](#).

**Solveit:** Children complete this fabulous [Banana Bob's Fruit and Veg Stall Activity Sheet](#).